

**ABSTRACT OF THE DISCLOSURE**

A method and system for over-advertising buffering resources for buffering packets coming into an Infiniband port. At least two IB data packets worth of flow control credits are advertised to the link partner for each virtual lane configured on the port so that the link partner may transmit packets at essentially full link bandwidth. The number of credits advertised may be greater than actual amount of buffering resources available to receive all the advertised packets. Once the actual amount of buffering resources available is less than a predetermined shutdown latency threshold, the port transmits zero credit flow control packets for each of the virtual lanes in order to shutdown the link partner from transmitting more packets. In one embodiment, an inline spill buffer is coupled between the port and shared buffers. The predetermined shutdown latency threshold is when all the shared buffers are in use. The inline spill buffer is sized to be capable of storing all the packets transmitted by the link partner during the shutdown latency. In another embodiment, no inline spill buffer is present, and the predetermined threshold is a reserved amount of the shared buffers large enough to store all the packets transmitted by the link partner during the shutdown latency.